

10

15

20

25

30

APPLICATION NUMBER: 09/768.141

FILLING DATE: 01/24/2001

DOCKET NUMBER:
COLLAGEN II NUTRITION 010

WHAT IS CLAIMED IS:

- 1. A method of preparing Kolla2 powder for oral administration as a dietary supplement to mammals which comprises, separating at lease one member of the group consisting of cartilage derived from warm-blooded animals containing partially water-soluble, denatured Collagen Type II protein and subdividing such cartilage into dose amounts for therapeutic effective levels.
 - 2. A method of preparing cartilage tissue for oral dietary supplement to humans afflicted with arthritic joint diseases whereas at least one member of the group consisting of cartilage derived from warm-blooded animals containing partially water-soluble, denatured Collagen Type II protein is separated from avian sternal cartilage tissue, the improvement of said cartilage containing Collagen Type II protein into dose amount suitable for treatment of arthritis in humans.
 - 3. The method of claim 1 wherein Kolla2 powder having an average molecular weight of about 50,000 daltons.
 - 4. The Kolla2 of Claim 3, whereas said Kolla2 is extracted from desiccated young chicken sternal cartilage and chicken cartilage Collagen Type II protein.
 - 5. A method of influence cartilage production in an individual with a connective tissue disorder, comprising orally administering to said individual an effective daily cartilage-inducing amount of Kolla2.
 - 6. The method of Claim 5, wherein said connective tissue disorder is selected from the group consisting of degenerative joint diseases, joint defects, osteoarthritis.
 - 7. The method of Claim 5, wherein said effective daily dosage amount is between about 600 mg and 10,000 mg. The method of Claim 5, wherein said effective daily dosage amount is between about 2,400 mg and 6,000 mg.
 - 8 The method of Claim 5, wherein said effective daily dosage amount is between about 2,400 mg and 3,600 mg.

5

15

20

- 9. A method of daily nutritional supplement of Kolla2 as arthritis preventative, comprising orally administering to an individual a daily dosage of Kolla2 having an average molecular weight of between about 45,000 and 65,000 daltons.
- 10. A method of preparing Kolla2 powder, comprising the following steps:
 - (a) cutting fresh 4-6 week young chicken sternal cartilage to within not less than about 2.5mm of the cartilage bone. Cartilage then deep frozen;
 - (b) grinding frozen cartilage into ground mesh;
- 10 (c) suspending cartilage in an aqueous solution;
 - (d) sterilizing ground cartilage;
 - (e) filtering ground cartilage;
 - (g) defatting and filtration;
 - (h) drying ground cartilage;
 - (i) milling ground cartilage to form Kolla2 powder.
 - 11. The method of Claim 10 whereas the aqueous solution is water.
 - 12. The method of Claim 10, whereas sterilization process is heating ground cartilage at about 95 °⊂ for about 35 minutes.
 - 13. The method of Claim 10, whereas defatting ground cartilage with ethanol.
 - 14. The method of Claim 10, drying ground cartilage is heating at 95 ° ⊂ for a minimum of 6 hours.
 - 15. The method of Claim 10, whereas milling ground cartilage into fine powder mesh between about 80 mesh to 200 mesh.